REMARKS

Claims 1-11 were examined and reported in the Office Action. Claims 1-5 stand rejected, and claims 6-11 were previously withdrawn from consideration and are canceled. Applicants amend claims 1-3 and add additional claims 12-20. Applicants submit that no new matter has been added herein. Applicants respectfully request reconsideration of claims 1-5 as amended, and consideration of additional claims 12-20 in view of at least the following remarks.

I. Specification

The Patent Office objects to the specification because of informalities. In response, please replace paragraph **[0001]** with the following:

[0001] This application is a divisional application of U.S. Patent Application No. 09/752,492, filed December 29, 2000, titled "Apparatus and Method for Forming an Alloy Layer Over a Substrate," now U. S. Patent No. 6,638,580.

Thus, Applicants request the Patent Office to withdraw the objection above.

II. Claims Rejected Under 35 U.S.C. §103

Claims 1-5 are rejected under 35 U.S.C. §103(a) as being unpatentable over U. S. Patent No. 5,120,925 issued to Ohnishi et al. ("Ohnishi") in view of U. S. Patent No. 6,660,631 issued to Marsh ("Marsh"). To render a claim obvious, all elements of the claim must be taught or suggested by at least one properly combined reference of the combination.

Applicants respectfully disagree with the rejection above for at least the reason that Onishi and Marsh cannot be properly combined. Onishi teaches forming conductive films with a focused ion beam in a gas atmosphere to modify an existing wiring pattern (e.g., see Figures 8A and 8B; and col. 5, lines 32-42). For example, Onishi teaches formation of a conductive deposition film on a sample already containing devices. (See Figure 1C, and Figures 6-10, and accompanying text such as col. 5, lines 33-42, which describe modifying an existing wiring pattern). In addition, Onishi also teaches a focused

ion beam technology for providing etching, transplantation, and repair of electronic devices already existing on a substrate or "sample". (See col. 1, line 60 through col. 2, line 30.)

Marsh describes a process for chemical vapor deposition (CVD) of an electrically conductive material to overlie a substrate or dielectric material. (See col. 4, lines 6-58.) To do this, Marsh describes forming an absorbed layer from a precursor composition on the surface of the substrate. (See col. 13, lines 16-18)

Thus, Applicants do not believe that either reference provides a motive to combine a focused ion beam technology for providing etching, transplantation, and repair of electronic devices already existing on a substrate with a chemical vapor deposition process for blanketing a substrate with a conductive layer. For example, Applicants assert that such a combination would render Onishi unsatisfactory for its intended purpose of modifying or repairing existing devices on a substrate, because the CVD gases taught in Marsh, when introduced to the chamber, would simply blanket the devices already existing on the substrate, thus modifying or damaging their electronic functionality. [See MPEP § 2144.X.D.] Hence, Applicants respectfully request that Patent Office withdraw the rejection of claim 1, for at least this first reason.

In addition, since neither reference provides a motive to combine and since combining the references would render Onishi unsatisfactory for its intended purpose, Applicants can only conclude that the motive to combine the references includes knowledge gleaned only from Applicants' disclosure. Hence, Applicants assert that the combination of Onishi with Marsh is the result of impermissible hindsight in accordance with MPEP § 2144.X.D. Thus, Applicants respectfully request that Patent Office withdraw the rejection of claim 1, for at least this second reason.

Applicants submit that dependent claims 2-5 being dependent on allowable base claim 1, as amended, are patentable over the cited references for at least the reasons explained above. Thus, Applicants respectfully request that Patent Office withdraw the rejection to dependent claims 2-5 as being unpatentable over the cited references.

Also, with respect to claim 2, in addition to the reasons given above with respect to claim 1, Applicants disagree because the stated references do not teach or suggest a program having instructions for controlling the introduction of each of at least two metal constituents selected from cobalt, metal carbonyl, molybdenum, and tungsten, as required by amended claim 2. Specifically, the Patent Office has not identified and Applicants are unable to find any teaching in Marsh of a program that accounts for the program having instructions as required by amended claim 2. In addition, the Patent Office has not identified and Applicants are unable to find any teaching in Onishi that describes the requirements of amended claim 2 noted above. Specifically, as admitted by the Patent Office, Onishi fails to teach a metal source including at least two metal constituents. Hence, neither Marsh, Onishi, nor the combination teach the limitation of amended claim 2 cited above. Thus, Applicants respectfully request that Patent Office withdraw the rejection of dependent claim 2 as amended, for at least this second reason.

Next, with respect to claim 3, in addition to the reasons given above with respect to claims 1 and 2, Applicants disagree with the rejection above because the cited references do not teach or suggest a program having instructions for forming a second alloy layer over a first alloy layer, as required by amended claim 3. Specifically, as described above with respect to claims 1 and 2, the Patent Office has not identified and Applicants are unable to find any teaching in Marsh or Onishi of a program having instructions as required by amended claim 3. Thus, Applicants respectfully request that the Patent Office withdraw the rejection of claim 3, for at least this additional third reason.

III. Additional Claims 12-20

Applicants point out that additional independent claim 12 includes a focused ion beam contacting at least two precursor gases to form a first alloy layer over a substrate. Thus, as described above with respect to claim 1, Applicants assert that the cited references do not teach or describe the limitation of claim 12 cited above.

Applicants submit that dependent claims 13-14 being dependent upon allowable base claim 1, are patentable over the cited references for at least the reasons cited above.

Next, Applicants point out that additional independent claim 15 includes forming a first layer of a first of the metal constituents and a second layer of a second of the metal constituents to create a multi-metal layer. However, similarly to as described above with respect to claim 1, Applicants assert that the cited references do not teach the limitations of claim 15 noted above.

Applicants submit that dependent claims 16-20 being dependent upon allowable base claim 15, are patentable over the cited references for at least the reasons given above.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending (1) are in proper form, (2) are neither obvious nor anticipated by the relied upon art of record, and (3) are in condition for allowance. A Notice of Allowance is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

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Dated: May 19, 2004

By: _____
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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail with sufficient postage in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia 22313-1450 on May 19, 2004.

Nadya Gordon 5/19/04

Nadya Gordon Date